

- C. **Instrument calibration.** For all measurements made to ensure compliance with this chapter, evidence must be submitted showing that the instrument or instruments used were calibrated within the manufacturer's suggested periodic calibration interval, and that the calibration is by methods traceable to the National Bureau of Standards. A letter must also be submitted stating that the measurements were made in accordance with good engineering practices and verifying the accuracy of the results of the measurements.

**33.274.080 Review of Radio and Television Broadcast Facility Regulations**

- A. **Review of City regulations.** The standards in this chapter and the radio and television facility conditional use requirements will be reviewed by the City of Portland in 1992 to determine their adequacy relative to public health.
- B. **New federal or state standards.** In the event that either the federal or state government adopts mandatory or advisory standards more stringent than those described in this chapter, the Planning staff will prepare a report and recommendation on any necessary revisions to the City's adopted standards. The Council will endeavor to bring the City standards into compliance with those standards within 30 days of the date the new standards become effective.



- (1) Antenna height above ground, design, dimensions, wind load rating, gain and radiation pattern.
  - (2) Failure characteristics of the antenna and documentation that the site and setbacks are of adequate size to contain debris.
  - (3) Ice hazards and mitigation measures which can be employed, including increased setbacks and/or deicing equipment.
- D. Studies and reports by a professional engineer licensed in the State of Oregon to establish compliance with the NIER emission standards of 430-109.3(E) except as exempted therein.
  - E. Agency coordination statements required by 430-109.3.F(2) or evidence of a good faith, timely effort to achieve such responses.
  - F. If the installation contains heating, cooling, electrical generating or other equipment likely to produce noise, the applicant shall submit a report from a licensed professional engineer documenting that the operation complies with applicable DEQ noise standards.
  - G. Proof of liability insurance coverage for the proposed communication tower or antenna. Such proof shall be submitted prior to issuance of a building permit. Liability insurance shall be maintained until the tower or antenna is dismantled. Failure to maintain insurance coverage shall constitute a violation of this Code.

430-109.3 Standards for Type II and III Applications:

A. General Criteria

- (1) Arrange structures and use areas to minimize impacts on adjacent developments and surrounding land uses.
- (2) Locate and design structures and uses to preserve, to the greatest extent possible, scenic views or vistas identified in the applicable community plan and viewable from adjacent properties or public thoroughfares, by considering setbacks, building height, bulk and landscaping.

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- (3) Orient major service activity areas (e.g., loading and delivery areas) of the proposed development, if any, away from existing dwellings.
- (4) Placement of more than one tower on a non-residential lot shall be permitted, provided all applicable regulations are met. Structures may be located as close to each other as technically feasible, provided failure characteristics of the towers on the site will minimize the potential for multiple failures in the event that one fails.
- (5) Towers 200 feet or less in height shall be finished or painted to minimize visual impact. If there is heavy vegetation in the immediate area, such towers shall be painted or finished from base to treeline to blend with the surrounding vegetation.
- (6) Towers more than 200 feet in height shall be painted in accordance with regulations of the FAA and the Oregon State Aeronautics Division.
- (7) Towers shall be illuminated as required by the Oregon State Aeronautics Division or FAA. However, no lighting shall be incorporated if not required by the Aeronautics Division, FAA or other responsible agency.

#### B. Setbacks

Notwithstanding the setback provisions of the individual land use districts, the setback provisions in Table A shall be applied to communication towers and antennas.

#### C. Access

In residential districts, when a site abuts a local street and a collector or an arterial, new access to the site shall be from the collector or arterial when there is compliance with applicable County transportation standards, including the requirements of Section 501-5.3 and the Washington County Uniform Road Improvement Design Standards. Access shall be taken from the local street when access to a collector or arterial cannot meet the applicable transportation standards.

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## D. Landscaping, Screening and Fencing

- (1) Landscaping, screening and buffering shall be provided as required by Sections 407 and 411. However, in no case shall the screening and buffering within or adjacent to a residential district be less than Section 411-6.3. Tree and shrub species shall be selected so as to achieve the maximum screening effect without interfering with transmitted signals.
- (2) Native vegetation on the site shall be preserved to the greatest practical extent. The applicant shall provide a site plan showing existing significant vegetation to be removed (as defined in Section 407-6.2.B) and vegetation to be replanted to replace that lost.
- (3) Notwithstanding the requirements of Section 411, trees and shrubs in the vicinity of guy wires shall be of a kind that would not exceed 20 feet in height or would not affect the stability of the guys, should they be uprooted.
- (4) The base of a communication tower and any guy anchors shall be fenced or otherwise designed to prevent access by unauthorized personnel.
- (5) In lieu of the preceding standards, the approval authority may allow use of an alternate detailed plan and specifications for landscape and screening, including plantings, fences, walls and other features designed to screen and buffer towers and accessory uses. The plan shall accomplish the same degree of screening achieved in (1), (2), (3) and (4) above, except as lesser requirements are desirable for adequate visibility for security purposes and for continued operation of existing bona fide agricultural or forest uses, including but not limited to produce farms, nurseries, and tree farms.

## E. Radio Frequency Emissions

- (1) A transmitting antenna shall not exceed or cause other facilities to exceed the radio frequency emission standards specified in Table B.

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- (2) A transmitting antenna that operates at less than 1000 watts ERP and that complies with the minimum siting distance to habitable structures shown in Table C is conclusively presumed to comply with the emission standards in Table B.
- (3) Unless the proposed antenna complies as outlined in Section 430-109.3.E(2), an application for a transmitting antenna subject to Section 430-109.3.E shall include a scaled map and exhibits showing:
  - (a) Horizontal and radial distance from the proposed antenna to the nearest point on the property line; the nearest habitable structure regularly occupied by people other than those residing or working on the property; the nearest publicly accessible spaces, such as parks and playgrounds; and the point(s) off the property with the highest calculated radio frequency emission level(s) and the elevation above sea level at those points.
  - (b) Ambient radio frequency emission levels in the frequency range of the proposed antenna measured at the points identified above.
  - (c) Calculated radio frequency emission levels after establishment of the proposed antenna(s) at the points identified above. Radio frequency emission level calculations shall be consistent with FCC Office of Science and Technology Bulletin 65 or other engineering practices recognized by the FCC, EPA, NCRP, ANSI, or similar organization.
- (4) If the calculated radio frequency emission level at any point identified in section 430-109.3.E(3)(a) is more than one-third the maximum radio frequency emission level permitted under Table B, then the antenna may only be approved subject to a condition that the applicant measure the radio frequency emission level at those points after the antenna is established, and that such measurements show the radio frequency emission level complies with Table B.

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Additional radio frequency emission tests shall be conducted every two years thereafter.

- (5) Radio frequency emission measurements.
  - (a) Radio frequency emission measurements required in Section 430-109.3.E shall be made by a licensed professional engineer with an FCC General Radio-Telephone License.
  - (b) Measurement shall comply with the latest version of American National Standards Institute (ANSI) Standard C95.3 Techniques and Instrumentation for the Measurement of Potentially Hazardous Electromagnetic Radiation at Microwave Frequencies, or with similar methods considered appropriate by the engineer and shall employ spatial averaging procedures.
  - (c) For all radio frequency emission measurements made to ensure compliance with this section, evidence must be submitted showing that the instrument or instruments used were calibrated within the manufacturer's suggested periodic calibration interval, and that the calibration is by methods traceable to the National Bureau of Standards. A letter must also be submitted verifying the accuracy of the results of the measurements and stating that the measurements were made in accordance with good engineering practices.
  - (d) Measurements shall be made when radio frequency emission levels are reasonably expected to be highest due to operating and environmental characteristics.
  - (e) The effect of contributing sources of radio frequency emissions below the lower frequency limit of a broadband measuring instrument may be included by separate measurement of these sources with a narrow band measuring instrument. Radio frequency emission levels of less than 20 microwatts per square centimeter or the minimum

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sensitivity of the instrument, whichever is less, shall be treated as zero.

- (6) Measurements and calculations shall be certified by the person responsible for them and shall be accompanied by an explanation of the protocol, methods, equipment, and assumptions used. The certification shall include an affidavit stating the qualifications of the person responsible for the measurements and calculations. If deemed necessary by the Director, the County may retain the services of an independent RF emissions expert to review the calculations and any subsequent RF emission measurements submitted by the applicant. The services of the independent expert shall be paid for by the applicant.
- (7) If the federal or state government adopts mandatory or advisory radio frequency emission standards more stringent than those described in this section, the Director shall prepare a report and recommendation to the Planning Commission and Board of County Commissioners to bring the County standards into compliance with those state or federal standards within a reasonable period of time after the date the new standards are effective.

#### F. Other Provisions

- (1) Signs. Notwithstanding the provisions of Section 414, all communication towers and antennas which are not located at the user's place of business or operation shall be identified with a sign not exceeding four (4) square feet. The sign shall list the owner or operator's name and emergency telephone number and shall be posted in a conspicuous place visible to the general public. Other signs may be located on the site as allowed by the underlying land use district.
- (2) Agency Coordination. The applicant shall provide the following information in writing from the appropriate responsible official:
  - (a) A statement from the Federal Aviation Administration that the application has



not been found to be a hazard to air navigation under Part 77, Federal Aviation Regulations, or a statement that no compliance with Part 77 is required.

- (b) A statement from the Oregon State Aeronautics Division that the application has been found to comply with the applicable regulations of the Division, or a statement that no such compliance is required.
  - (c) A statement from the Federal Communications Commission that the application complies with the regulations of the Commission or a statement that no such compliance is necessary.
  - (d) The statements in (a) through (c) shall be waived when the applicant demonstrates that a good faith, timely effort was made to obtain such responses but that no such response was forthcoming, provided the applicant conveys any response received; and further provided any subsequent response that is received is conveyed to the approval authority as soon as possible.
- (3) If the installation contains heating, cooling, electrical generating or other equipment likely to produce high noise levels, the operator shall submit appropriate evidence prepared by qualified personnel documenting that the operation complies with applicable DEQ noise standards. Such evidence shall be submitted within forty-five (45) days after the date the equipment commences operation.
  - (4) The applicant shall submit a statement describing the nature and extent of any interference which may be associated with the proposed communication tower and/or antenna and describing the applicant's responsibilities under federal regulations.

430-109.4 Additional Standards for Type II and III Applications  
in Residential Districts

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- A. Alternative sites. If a communication tower or antenna is proposed, other than as a replacement for an approved and conforming tower, the applicant shall submit documentation to show:
- (1) That other existing or approved communication towers and other existing or approved structures cannot accommodate the antenna(s) planned for the new tower. Proposed antenna(s) cannot be accommodated on another existing or approved tower or other structure if:
    - (a) The antenna(s) would exceed the structural capacity of existing and approved towers, considering their existing and planned use;
    - (b) The antenna(s) would cause RF interference with other existing or approved antennas, and that interference cannot be prevented at reasonable cost;
    - (c) Existing or approved towers or other structures do not have space on which the proposed antenna(s) can be placed so that it will fulfill the purpose for which it is intended;
    - (d) The proposed antenna(s) cannot function effectively given the communication services to be provided and the user group or area it is intended to serve; or
    - (e) Addition of the proposed antenna(s) to an existing tower or structure would cause radio frequency emissions in excess of the levels allowed by Table B or in excess of 1000 watts ERP total output power.

The applicant need not contact a tower owner whose facility has been determined unsuitable for additional antennas by a previous application.

Use of an existing or approved tower or structure is not precluded simply because a reasonable fee is charged for use of the tower or structure or because of reasonable costs necessary to adapt the existing and proposed antenna(s).

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- (2) That the tower or antenna(s) cannot be sited in a non-residential district. The proposed antenna(s) cannot be sited in another district if:
- (a) Sites in non-residential districts would not accommodate the proposed antenna(s) or the communication tower associated with the antenna(s) considering the site size needed for the tower, topography and other physical characteristics of possible alternative sites, and the communication services to be provided by the proposed antenna(s);
  - (b) The tower or antenna(s) would pose a hazard to aircraft as an obstacle or source of adverse electromagnetic interference;
  - (c) The proposed antenna(s) cannot function effectively given the communication services to be provided and the user group or area it is intended to serve; or

B. Maximum Height

Transmitting and receiving antennas and communication towers shall be no higher than necessary to provide adequate communications for immediate and future planned use, and shall be freestanding where the negative visual effect is less than would be created by use of a guyed tower.

C. Clustering

New communication towers and antennas may not be sited in a residential district within 1000 feet of any existing nonexempt communication tower and/or antenna. This restriction does not apply to the siting of new antennas on existing communication towers.

If a new communication tower and/or antenna is proposed to be sited in a residential district, the applicant shall submit evidence that there are no existing nonexempt communication towers and/or antennas located within 1000 feet of the proposed facility. The 1000 foot radius shall be measured from the center of the footprints of any

existing and the proposed towers and/or antennas, not from property lines or guy wire anchors.

430-109.5 Additional Standards for Type III Applications in Residential Districts

A. Communication tower sharing. A new communication tower, or a replacement for an existing nonconforming tower, shall accommodate shared use by the maximum number of antennas that are physically and technologically compatible with the proposed antenna(s) and that do not increase the height or footprint of the tower.

(1) An applicant shall describe the nature and approximate number of antennas that can be accommodated on the tower.

(2) A tower subject to this section may be approved only subject to a condition that applicant negotiate in a timely manner and in good faith for shared use of the tower by third parties and allow shared use of the tower if the third party agrees in writing to pay a reasonable pro rata charge for sharing, including all charges necessary to modify the tower to accommodate shared use and to observe technical requirements warranted to avoid radio frequency interference. An applicant will not be required to permit shared use of any unused tower capacity that the applicant demonstrates is needed for the applicant's future system expansion or modification plans. This condition shall run with the land and be binding on subsequent purchasers of the tower site. Failure to comply with this condition shall be grounds for revocation of the permit for the tower.

B. Other scenic views and vistas not identified in the Community Plans. The tower/antenna shall be located and designed to minimize obstruction or degradation of views and vistas by considering setbacks, building heights, bulk and landscaping.

430-109.6 No source of non-ionizing electromagnetic radiation, including facilities operational before the effective date of these regulations, shall exceed the RF emission standards specified in Section 430-109.3.E., Table B.

TABLE A  
SETBACK PROVISIONS

ALLOWED USE	SETBACK PROVISION (See below)	ILLUSTRATION
<u>RESIDENTIAL DISTRICTS</u>		
Type II Uses:		
(a) Towers and Antennas located on existing structures or buildings	II-R/I-NR	Fig. 1
(b) Antennas located on previously approved towers	Not applicable	
Type III Uses:		
(c) Free-standing towers and antennas to a maximum height of 100'	III-R	Fig. 2
<u>NONRESIDENTIAL DISTRICTS</u>		
Type I Uses:		
(a) Free-standing towers and antennas to maximum height of underlying district	I-NR	Fig. 3
(b) Towers and antennas located on existing structures or buildings	II-R/I-NR	Fig. 1
(c) Antennas located on previously approved towers	Not applicable	
Type II Uses:		
(d) Free-standing towers and antennas up to 200 feet in height	III-NR	Fig. 4
(e) Towers and antennas on parcels with 50% or more of perimeter abutting residential districts	III-NR	Fig. 4
Type III Use:		
(f) Free-standing towers and antennas over 200 feet in height	III-NR	Fig. 4
<u>R = RESIDENTIAL DISTRICT; NR = NONRESIDENTIAL DISTRICT</u>		

II-R/I-NR: The base of the antenna and/or its supporting tower shall maintain setbacks at least equal to the height of the antenna and its supporting tower. Dish or panel antennas shall be located at least fifty (50) feet above grade and meet the minimum yard requirements of the underlying district (Figure 1).

## (TABLE A CONTINUED)

III-R: Provide setbacks for the tower/antenna at least equal to the height of the tower/antenna above grade between the base of the tower and the outer boundary of the site. Provide setbacks of at least fifty (50) feet between any guy anchors and the outer boundary of the site. Provide a setback of at least twenty-five (25) feet between any accessory structures (except fences) and the outer boundary of the site (Figure 2).

I-NR: Provide setbacks as required by the underlying land use district. However, in no case shall the setbacks be less than 100 percent of the height of the tower above grade between the base of the tower and the boundary of any residential district existing at the time the application is submitted (Figure 3).

III-NR: Provide setbacks for the antenna/tower equal to 30 percent of the height of the tower above grade between the base of the tower and the outer boundary of the site. In no case shall the setback be less than 100 percent of the height of the tower above grade between the base of the tower and the boundary of any residential district existing at the time the application is submitted. Provide setbacks for guy anchors and accessory uses (except fences) in accordance with the provisions of the underlying land use district (Figure 4).

Notwithstanding the provisions of III-NR above; within the EFU, AF-20 and EFC Land Use Districts; the setbacks shall also not be less than 100 percent of the height of the tower above grade between the base of the tower and any dwelling unit in these districts existing at the time the application is submitted.

FIGURE 1

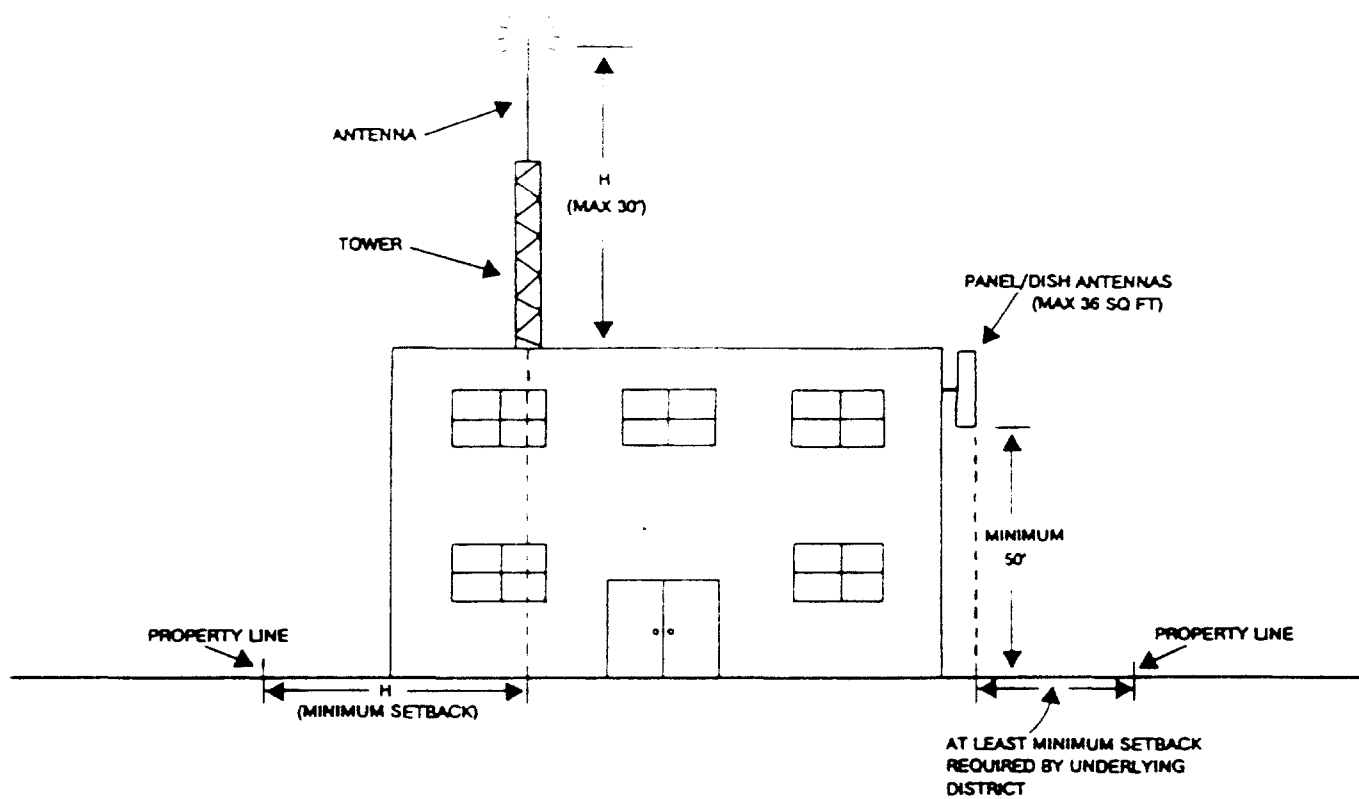


FIGURE 2

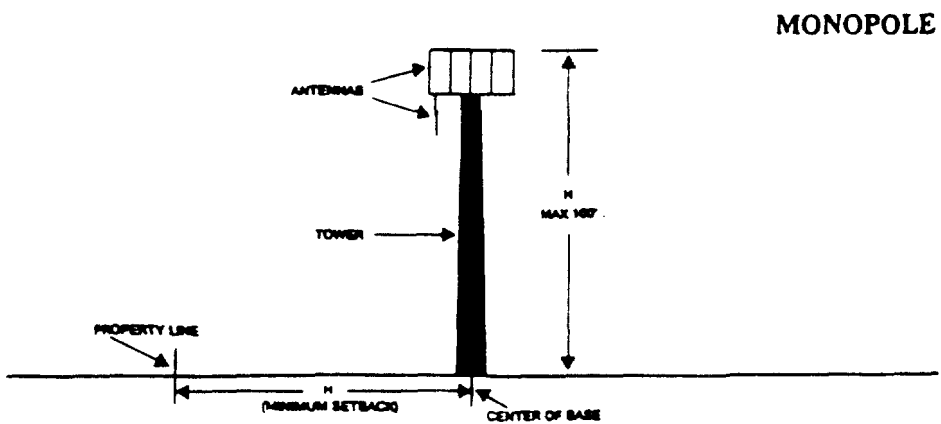
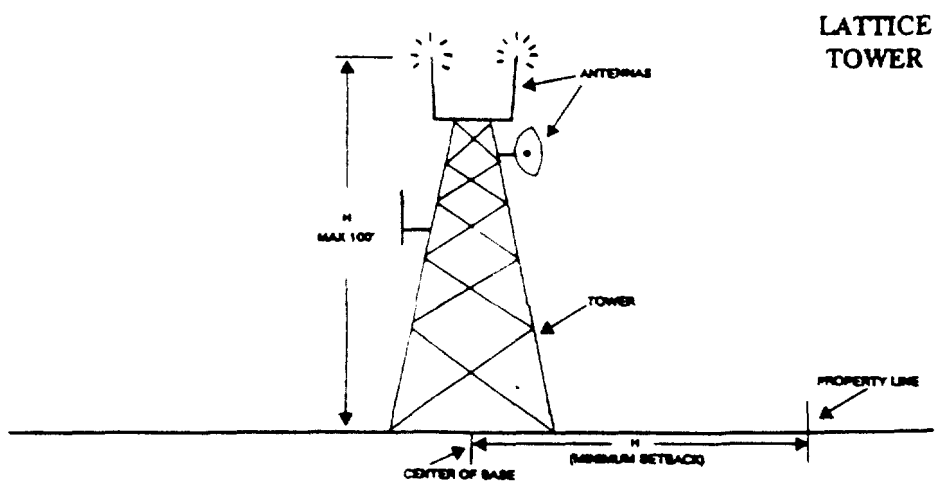
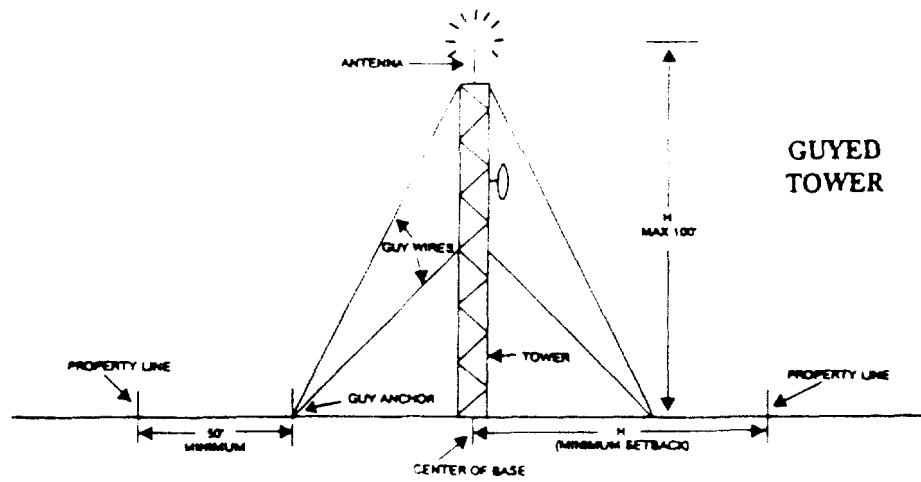




FIGURE 3

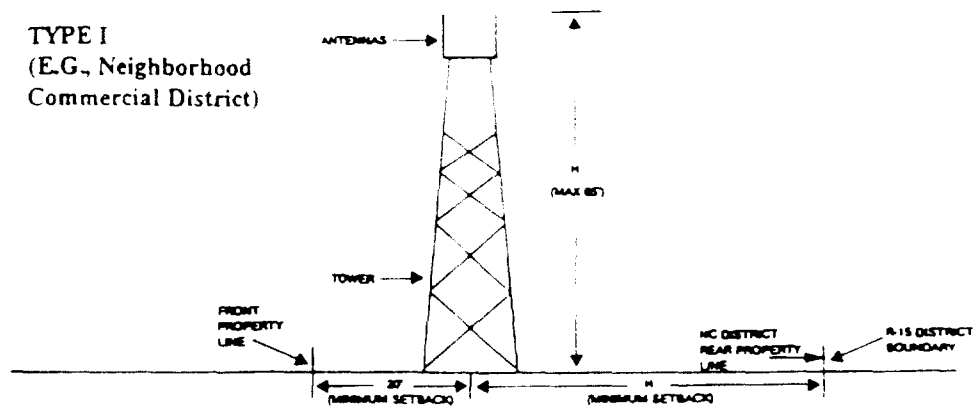


FIGURE 4

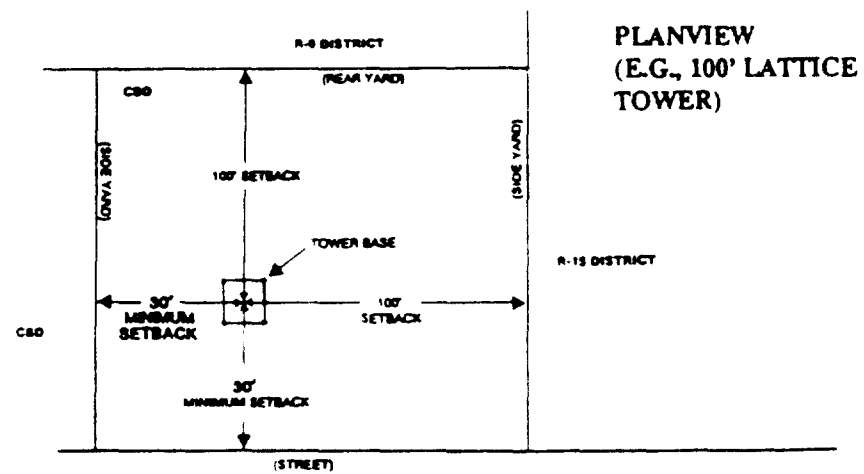
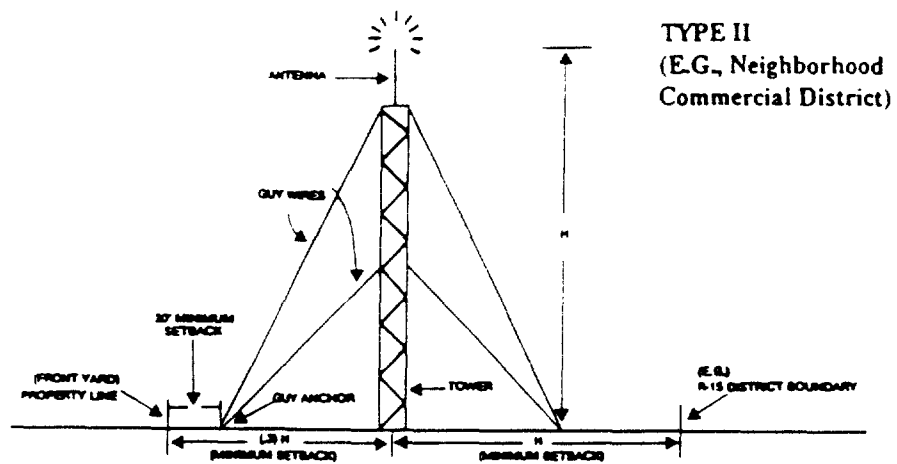


Table B  
RF Emission Standards<sup>a</sup>

Frequency Range	Mean Squared Electric ( $E^2$ ) Field Strength ( $V^2/m^2$ ) <sup>b</sup>	Mean Squared Magnetic ( $H^2$ ) Field Strength ( $A^2/m^2$ ) <sup>c</sup>	Equivalent Plane-Wave Power Density ( $\mu W/cm^2$ ) <sup>d</sup>
100KHz-3MHz	80,000	0.5	20,000
3MHz-30MHz	$4,000(180/f^2)^e$	$0.025(180/f^2)$	$180,000/f^2$
30MHz-300MHz	800	0.005	200
300MHz-1500MHz	$4,000(f/1500)$	$0.025(f/1500)$	$f/1.5$
1500MHz-300GHz	4,000	0.025	1000

<sup>a</sup> All standards refer to root mean square (rms) measurements gathered by an approved method.

<sup>b</sup>  $V^2/m^2$  = Volts squared per meter squared.

<sup>c</sup>  $A^2/m^2$  = Amperes squared per meter squared.

<sup>d</sup>  $\mu W/cm^2$  = Microwatts per centimeter squared.

<sup>e</sup>  $f$  = Frequency in megahertz (MHz).

Table C  
Minimum Siting Distance to Habitable Structures<sup>a</sup>

Effective Radiated Power (ERP)	Frequency (f) (MHz)	Minimum distance from Point A to habitable structure (feet) <sup>b</sup>	Minimum distance from Point B to habitable structure (feet) <sup>c</sup>
<100 watts	All	10	3
100 watts to 999 watts	All	15	6
1,000 watts to 9,999 watts	<7	11	5
	7-30	$f/0.67$	$f/1.5$
	30-300	45	20
	300-1500	$780/\sqrt{f}$	$364/\sqrt{f}$
	>1500	20	10
≥10 Kw	<7	17.5	8
	7-30	$f/0.4$	$f/0.91$
	30-300	75	33
	300-1500	$1300/\sqrt{f}$	$572/\sqrt{f}$
	>1500	34	15

<sup>a</sup> Measurements are made from point A and B on the antenna to the nearest habitable structure normally occupied on a regular basis by someone other than the immediate family or employees of the owner/operator of the antenna.

<sup>b</sup> Point A is the highest point of the antenna (not the tower) to the structure.

<sup>c</sup> Point B is the closest point of the antenna to the structure.

**G**

**25.10.270 Transmission tower.**

"Transmission tower" means a principal use broadcasting structure that is constructed above ground or water, or is attached to or on top of another structure, and is intended to support an antenna and accessory equipment, or which is itself an antenna.

(Ord. 116057 §1(part), 1992.)

**25.10.275 Transmitter.**

"Transmitter" means equipment that generates radio signals for transmission via antennas.

A. Transmitter, Hand-Held. "Hand-held transmitter" means a transmitter normally operated while being held in the hands of the user.

B. Transmitter, Portable. "Portable transmitter" means a transmitter that is moved from one (1) site to another and is operated at each site for a continuous period of less than one (1) month.  
(Ord. 116057 §1(part), 1992.)

**Subchapter III Radiofrequency Radiation Standards**

**25.10.300 Radiofrequency radiation standards.**

A source of radiofrequency radiation, by itself or in combination with other sources of radiofrequency radiation, shall not expose the general population to ambient radiation that exceeds the root mean squared electric or magnetic field strength, or their equivalent plane-wave free-space power density as averaged over a six (6) minute period, for the frequency ranges and duration described in Table 25.10.300 A.

Table 25.10.300 A

Frequency (MHz)	Mean Squared Electric Field Strength ( $V^2/m^2$ )	Mean Squared Magnetic Field Strength ( $A^2/m^2$ )	Equivalent Plane-wave Power Density ( $\mu W/cm^2$ )
.1 to 3	80,000	0.5	20,000
3 to 30	4,000 (180/f <sup>2</sup> )	0.025 (180/f <sup>2</sup> )	180,000/f <sup>2</sup>
30 to 300	800	0.005	200
300 to 1,500	4,000 (f/1,500)	0.025 (f/1,500)	f/1.5
1,500 to 300,000	4,000	0.025	1,000

Note:

f = Frequency in megahertz (MHz);  
 $V^2/m^2$  = Volts squared per square meter;  
 $A^2/m^2$  = Amperes squared per square meter;  
 $\mu W/cm^2$  = Microwatts per square centimeter.

Compliance with the radiofrequency radiation standards is determined from spatial averages of power density or the mean squared electric and magnetic field strengths over a volume equivalent to the human body. The peak radiofrequency radiation levels shall not exceed twenty (20) times the allowed spatially averaged values at frequencies below three hundred (300) MHz, nor the equivalent power density of four thousand (4,000)  $\mu W/cm^2$  for frequencies between three hundred (300) MHz and six thousand (6,000) MHz, (f/1.5)  $\mu W/cm^2$  for frequencies between six thousand (6,000) MHz and thirty thousand (30,000) MHz, and twenty thousand (20,000)  $\mu W/cm^2$  at frequencies above thirty thousand (30,000) MHz. This requirement may be met by measurement of the radiofrequency radiation level along a vertical line at intervals not exceeding twenty centimeters (20 cm) over the vertical extent of an individual and calculating the average value of the readings.

(Ord. 116057 §1(part), 1992.)

**25.10.310 Calculations and measurements.**

A. All calculations and measurements for the purposes of determining radiofrequency radiation levels shall be carried out as follows:

1. Ambient radiofrequency radiation levels shall be measured using equipment gener-

ally recognized by the Environmental Protection Agency (EPA), National Council on Radiation Protection and Measurements (NCRP), American National Standards Institute (ANSI), National Bureau of Standards (NBS), or similarly qualified organization as suitable for measuring radiofrequency radiation at frequencies and power levels of the proposed and existing sources of radiofrequency radiation and calibrated as recommended by the manufacturer in accord with methods used by the National Bureau of Standards.

2. The effect of contributing individual sources of radiofrequency radiation within the frequency range of a broadband measuring instrument may be specified by separate measurement of these sources using a narrow-band measuring instrument. All sources in the resonant frequency range (thirty (30) MHz to three hundred (300) MHz) shall be added to show the total power density.

3. Radiofrequency radiation measurements shall be made when radiofrequency radiation levels are expected to be highest due to operating and environmental conditions.

4. Radiofrequency radiation measurements shall be made following the spatial and time averaging procedures as recommended by the American National Standard Institute (ANSI) publication: American National Standard Recommended Practices for the Measurement of Potentially Hazardous Electromagnetic Fields — Radiofrequency and Microwave.

5. For frequencies in the range of 0.1 to thirty (30) MHz, radiofrequency radiation levels shall be determined by measurement of both the electric and magnetic field strengths (or their squares) or the equivalent plane-wave free-space power densities associated with the electric and magnetic fields.

B. Radiofrequency radiation calculations shall be consistent with Office of Science and Technology Bulletin No. 65 of the Federal Communications Commission, or other engineering practices recognized by the Environmental Protection Agency, National Council on Radiation Protection and Measurements, American National Standards Institute, National Bureau of Standards or similarly qualified organization.

C. Measurements and calculations shall be certified by the person responsible for them and shall be accompanied by an explanation of the

protocol, methods, equipment, and assumptions used. The certification shall include an affidavit stating the qualifications of the person responsible for the measurements and calculations. The Administrator shall approve the measurements and calculations.

(Ord. 116057 §1(part), 1992.)

#### **25.10.320 Radiofrequency burns and shock standard.**

A source of radiofrequency energy shall not cause more than fifty (50) milliamps of current to flow through the index finger of a person in contact with a metallic object in any location to which the general population has legal access. This may be determined by measuring the current through a resistance equivalent to the human body. The Administrator shall determine when measurements to determine compliance with this provision shall be required.

(Ord. 116057 §1(part), 1992.)

#### **25.10.325 Establishment of state or federal standards.**

In the event the state or federal government promulgates mandatory or advisory standards more stringent than those described in this chapter, such state or federal standards shall automatically become effective, and the Administrator shall transmit to the City Council amendments appropriate to cause this chapter to conform with such state or federal standards.

(Ord. 116057 §1(part), 1992.)

#### **25.10.330 Retroactivity.**

The standards contained in Section 25.10.300 shall apply to all utilities in existence at the time of the adoption of this chapter.<sup>1</sup> Any changes in these standards shall apply to utilities in existence at the time of such changes, as well as to new utilities, including those for which an application for an operating permit has been made.

(Ord. 116057 §1(part), 1992.)

1. Editor's Note: Ordinance 116057, codified in this chapter, was adopted by the City Council on January 27, 1992.

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1 shock/burn levels are exceeded. This may be modified if natural  
2 features, such as an adjoining waterway, or a topographic feature  
3 preclude access.

4 B. Signed to warn the public of areas of the site where:

5 1. NIER standards are exceeded; and

6 2. High risks for shocks or burns are present.

7 NEW SECTION. SECTION 9. There is added to K.C.C. 21 a new  
8 section to read as follows:

9 Interference. Applications for building, conditional use  
10 and/or unclassified use permits shall include:

11 A. A statement describing the nature and extent of  
12 interference which may be caused by the proposed communication  
13 facility and the applicant's responsibilities under FCC rules and  
14 regulations;

15 B. Unless the division determines that there will be no  
16 noticable interference from the proposed communication facility,  
17 notification of expected interference shall be provided as  
18 specified in section 17 of this ordinance; and

19 C. General information concerning the causes of  
20 interference and steps which can be taken to reduce or eliminate  
21 it.

22 NEW SECTION. SECTION 10. There is added to K.C.C. 21 a new  
23 section to read as follows:

24 NIER exposure standards. A communication facility, by  
25 itself or in combination with others, shall not expose the public  
26 to NIER that exceeds the electric or magnetic field strength,  
27 the power density, for the frequency ranges and durations  
28 described in Appendix B of this ordinance; or cause whole-body  
29 energy absorption of .08 W/Kg or more.

30 NEW SECTION. SECTION 11. There is added to K.C.C. 21 a new  
31 section to read as follows:

32 NIER measurements and calculations. NIER levels shall be  
33



